

REMARKS

Claims 1, 2 and 4-22 are pending in this application. Claims 1, 7, 10, 21 and 22 are independent claims. By this amendment, claims 1, 4, 7, 9-13, 15-17, 21 and 22 are amended. Reconsideration in view of the above amendments and following remarks is respectfully solicited.

Applicants wish to thank Examiner Shelia Clark for the courtesies extended to Applicants' representative, Carolyn Baumgardner, during the June 10, 2003 personal interview. During the interview, the claim language and the distinguishing features of the claimed invention were discussed. The substance of the personal interview is summarized in the following remarks.

Allowable Subject Matter

Applicants gratefully acknowledge the Examiner's indication of allowable subject matter in claims 10-20 over the art of record, pending improved claim recitations. Applicants respectfully submit that the amendments to claims 10-13 and 15-17 clarify the recitations contained therein. As such, claims 10-20 are in condition for allowance.

Furthermore, applicants respectfully submit that all of claims 1, 2 and 4-22 are allowable, for at least the reasons set forth below.

The Claims Satisfy The Requirements Of
35 U.S.C. §112, 1st Paragraph

The Office Action reject claims 1, 2, 4-9, 21 and 22 under 35 U.S.C. §112, 1st paragraph. This rejection is respectfully traversed.

During the personal interview of June 10, 2003, applicants explained the objective of the claimed invention with reference to the specific claim language used. The amendments presented herein are aimed at clarifying the intended purpose of the claimed invention.

Applicants respectfully submits that the amendments to claims 1, 4, 7, 9, 21 and 22 obviates the rejection of claims 1, 2, 4-9, 21 and 22 under 35 U.S.C. §112, 1st paragraph. In particular, the amended claim clarify the type of processing performed and how this processing applies a stress to the semiconductor element, causing the element to deform when being detached from the board, which prevents any reliable analysis thereto.

Accordingly, withdrawal of the rejection of claims 1, 2, 4-9, 21 and 22 under 35 U.S.C. §112, 1st paragraph is respectfully solicited.

The Claims Define Patentable Subject Matter

The Office Action rejects: (1) claims 1, 2, 5, 7-9 and 22 under 35 U.S.C. §103(a) as being unpatentable over Applicants' Prior Art Figure 19 and the Admitted Prior Art in applicants' disclosure on pages 5-6.

This rejection is respectfully traversed.

Applicants respectfully submits that the combination of cited art fails to teach or suggest each and every feature as set forth in the claimed invention.

The Office Action asserts that applicants' own disclosure on page 5, last paragraph, discloses semiconductor element 102 as being secured level onto a board 103, wherein the element is taught to operate normally when packaged on the board. The Office Action

also asserts that applicants' specification discloses that element 2 may be peeled or detached from the board. (see page 3 of Office Action). However, such disclosures in applicants' specification is not what is claimed.

As clarified at the personal interview, the present invention relates to semiconductor element that is secured to a board in a level position. Such a semiconductor element is design to operate only when the chip is maintained in this level position. At least part of the back of the semiconductor element is subjected to surface processing wherein a stress is applied to the element. The stress causes at least part of the element to deform when being detached from the board. As a result, any reliable analysis of the element once removed from the board is prohibited.

In this way, the present semiconductor device in the present application ensures that no reliable analysis can be conducted on the LSI circuit once the chip is detached, thus safe-guarding any secrets concealed therein.

In contrast to the present invention, the Examiner is relying on conventional disclosures contained in the present application. However, the conventional elements mentioned in applicants' specification fail to set forth a semiconductor element having a stress applied thereto, wherein this stress causes the element to deform when being detached from the board. The only thing that is disclosed about the conventional art is that it is secured level onto the board and that it continues to be level (non-deformed) once removed from the board. (see applicants' specification, page 5). As a result, the conventional chip 102 can be reliably analyzed once removed from the board, revealing any secrets contained therein.

To establish a *prima facie* case of Obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

Applicants respectfully submit that the Office Action has failed to show how the cited art teaches each and every feature as set forth in the claimed invention, especially the surface processing and the stress applied therewith.

Applicants respectfully submit that not only does the references fail to teach or suggest each and every feature as set forth in the claimed invention, but that one of ordinary skill in the art would not have been motivated to modify the teachings of the cited art because there is no teaching or suggestion regarding how or why one would modify such a device to arrive at the claimed invention.

Applicants respectfully submit that independent claims 1, 7, 21 and 22 are allowable over the cited art for at least the reasons noted above.

As for each of the dependent claims not particularly discussed above, these claims are also allowable for at least the reasons set forth above regarding their corresponding independent claims, and/or for the further features claimed therein.

Appl. No.: 09/820,671
Docket No.: 1248-0538P

Accordingly, withdrawal of the rejection of claims 1, 2, 5, 7-9 and 22 under 35 U.S.C. §103(a) is respectfully requested.

Conclusion

In view of the foregoing, Applicants respectfully submit that the application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact Carolyn T. Baumgardner (Reg. No. 41,345) at (703) 205-8000 to schedule a Personal Interview.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment from or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §1.16 or under 37 C.F.R. §1.17; particularly, the extension of time fees.

Respectfully submitted,
BIRCH, STEWART, KOLASH & BIRCH, LLP

By 
Charles Gorenstein, #29,271

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000

CG/CTB/mpe
1248-0538P